

# MODIS IOT Weekly Report

Mission Operations Days: 2000/092 to 2000/098

March 31, 2000 20:00:00 GMT to April 7, 2000 20:00:00 GMT

## Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in Science Mode

MODIS has no known Anomalies

Blackbody	A On; B Off	Nominal
Calibration Electronics	A On; B Off	Nominal
Control Processor	A On; B Off	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	A On; B off	Nominal
FIFO Memory	1 & 2 On; 3 & 4 Off	Nominal
Format Processor	A On; B off	Nominal
PC FPA	A On	Nominal
Power Supply: 1	On	Nominal
2	Off	Nominal
PV FPAs: VIS	A On	Nominal
NIR	A On	Nominal
SMIR	A On	Nominal
LWIR	A On	Nominal
Radiative Cooler:		
Outgas Heaters	Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	A On; B off	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A On; B Off	Nominal
Flight Software	Rev BD	Nominal
Inhibit Ids Set	54 (SRCA)	Supsended SRCA activity
TMONs enabled	66,67	Nominal

This Week's Completed MODIS Activities:

Saturday, April 1, 2000

No Activities

Sunday, April 2, 2000

No Activities

Monday, April 3, 2000

094/03:18:07 ATC OA-15 SD/SDSM Open

094/04:57:00 ATC OA-16 SD/SDSM Screened

094/20:55 Real-time Clear inhibit ID #54 (SRCA)

Tuesday, April 4, 2000

095/15:00:00 ATC Blackbody to 315K

095/16:38:00 Real-time Set Blackbody duty cycle to 100%

095/22:00:00 ATC Blackbody to 270K

095/22:04:00 Real-time Set Blackbody duty cycle to 33%

Wednesday, April 5, 2000

096/11:19:59 ATC OA-16 SD/SDSM Screened

096/13:51:20 ATC OA-23 SRCA Full Spatial

096/19:00:00 ATC Blackbody to 290K

Thursday, April 6, 2000

097/15:00:00 ATC Blackbody to 315K

097/14:56:00 Real-time Set Blackbody duty cycle to 100%

097/19:36:00 Real-time Set inhibit ID #54 (SRCA)

097/22:00:00 ATC Blackbody to 270K

097/22:00:?? Real-time Set Blackbody duty cycle to 33%

Friday, April 7, 2000

098/17:43:51 ATC OA-16 SD/SDSM Screened

098/19:00:00 ATC Blackbody to 290K

This Week's Scheduled MODIS Activities Not Completed:

Monday, March 27, 2000

094/04:10:38 ATC OA-19 SRCA Full Radiometric (inhibited)

Friday, April 7, 2000

098/10:17:56 ATC OA-22 SRCA Full Spectral Part 1 (inhibited)

098/12:12:40 ATC OA-22 SRCA Full Spectral Part 2 (inhibited)

098/13:35:05 ATC OA-22 SRCA Full Spectral Part 3 (inhibited)

098/15:30:25 ATC OA-22 SRCA Full Spectral Part 4 (inhibited)

Upcoming MODIS Events:

Saturday, April 8, 2000

No Activities

Sunday, April 9, 2000

No Activities

Monday, April 10, 2000

101/03:23::29 ATC OA-15 SD/SDSM Open

101/05:02:22 ATC OA-16 SD/SDSM Screened

101/20:02:00 ATC Blackbody to 270K

Tuesday, April 11, 2000

102/14:00:00 ATC Blackbody to 315K

102/14:00:00 Real-time Set Blackbody duty cycle to 100%

101/22:00:00 ATC Blackbody to 270K

102/22:00:00 Real-time Set Blackbody duty cycle to 33%

Wednesday, April 12, 2000

103/?? ATC OA-16 SD/SDSM Screened

103/19:00 ATC Blackbody to 290K

103/19:48 Drag Make-up Maneuver

Thursday, April 13, 2000

104/14:55:33 IRU Cal Slew (+10 deg Roll, duration = 00:23:40)

104/16:34:26 IRU Cal Slew (-10 deg Roll, duration = 00:23:40)

104/18:13:19 IRU Cal Slew (+30 deg Yaw, duration = 00:33:40)

104/19:52:13 IRU Cal Slew (-30 deg Yaw, duration = 00:33:40)

Friday, April 14, 2000

105/?? ATC OA-16 SD/SDSM Screened

#### Maneuvers:

Wed, April 12, 2000 - Drag Make-up Burn  
Planned GMT Time: 19:48

Thur, April 13, 2000 - Attitude Cal Slews  
Planned GMT Times: 14:55, 16:34, 18:13, 19:52

Tue, April 25, 2000 - MODIS Yaw Maneuvers  
Planned GMT Times: 14:06, 15:46, 17:26, 19:06, 20:45, 22:25

Wed, April 26, 2000 - MODIS Yaw Maneuvers  
Planned GMT Times: 13:10, 14:50, 16:30, 18:10, 19:50, 21:29

Thur, April 27, 2000 - Inclination Maneuver  
Planned GMT Time: 20:22 (backup time at 22:01)

Fri, April 28, 2000 - Post-inclination Drag Makeup Maneuver  
Planned GMT Time: TBS

Tue, May 8, 2000 - Clear Deep Space Cal – Pending Science Team Approval  
Planned GMT Time: 16:18

Tue, May 16, 2000 - Lunar Deep Space Cal  
Planned GMT Manuver Time: 17:08

#### MODIS Anomalies:

None.

#### General Instrument Comments:

MODIS is in Science Mode on the A-side with the SVD and NAD open.

#### MODIS Telemetry Trends:

Telemetry is nominal.

#### Non-MODIS Significant Events:

NASA conducted a “Security Scan” on the ops center on Thursday, Day 097. This brought everything except commanding capabilities to its knees. The planning and scheduling system is having a hard time recovering. Everyone associated with Terra Ops was affected. This caused many workarounds to be implemented for Thursday and Friday operations. The MODIS instrument was not in any danger during this event, although it has certainly kept us on our toes!

Limited Life Item Status:

SRCA 10W Lamp #1: 151.5 of 500 hours  
SRCA 10W Lamp #2: 127.5 of 500 hours  
SRCA 10W Lamp #3: 136.7 of 500 hours  
SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 545.8 of 4000 hours  
SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1188 of 3022 Movements  
Nadir Aperture Door: 530 of 1316 Movements  
Space View Door: 436 of 1316 Movements